UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

March 18, 2005

Mr. Chuck McLaughlin
OPOG Project Coordinator
de Maximis, Inc.
5225 Canyon Crest Drive, Building 200, Suite 253
Riverside, CA 92507

RE: Omega Chemical Superfund Site Engineering Evaluation/Cost Analysis Annotated Outline of March 11, 2005

Dear Mr. McLaughlin:

EPA's comments on the subject document are as follows.

1. Section 3.1. Removal Action Objectives should be provided in the outline so that they can be compared against the proposed alternatives. Although each of the alternatives will ultimately be evaluated according to the criteria specified in Section 4.2, no alternative should be included in the analysis that can not meet the RAOs.

2. Section 4.1. Anticipated groundwater and air pollution control technologies should be provided in the outline so that potential permitting problems can be identified. As an example, it may be difficult or impossible to obtain permits for thermal treatment.

3. Section 6.3. The RAP should be prepared as a separate stand-alone document as required in the Partial Consent Decree. However EPA is willing to review and comment on the format and content of the RAP before a draft is formally submitted, including as part of the EE/CA.

4. Section 3.3, Summary of Risk Assessment. The EE/CA guidance document "Guidance on Conduction Non-time-Critical Removal Actions Under CERCLA" (EPA/540-R-93-057, August 1993) includes the "Streamlined Risk Evaluation" as part of the Site Characterization. It is recommended that the current Section 3.3, Summary of Risk Assessment be renamed "Streamlined Risk Evaluation" and be moved to Section 2.0, Site Characterization Summary as Section 2.4, Streamlined Risk Evaluation.

For the Omega Phase 1a Streamlined Risk Evaluation the following are recommended:

- Compare the groundwater chemical concentrations in Phase 1a Area wells to MCLs (Federal and State of California) and to current Region 9 Tap Water PRGs.

- Cumulative human health risks and hazards for chemicals in groundwater in the Phase 1a Area can be efficiently estimated using Region 9 PRGs by applying the stepwise risk ratio approach, which is described in the 2004 Users Guide for the Region 9 PRGs Table (on pages 14 and 15). This approach can be used for each well in the Phase 1a Area (or the wells that are most highly impacted).

  Cancer Risk. For cancer risk estimates, take the site-specific chemical concentration and divide by the Region 9 PRG concentrations that are designated for cancer evaluation ("ca"). Multiply this ratio by 10-6 to estimate chemical-specific risk for a reasonable maximum exposure (RME). For multiple chemicals, simply add the risk for each chemical.

  Noncancer hazard. For non-cancer hazard estimates, divide the chemical concentration term by its respective non-cancer Region 9 PRG designated as "nc" and sum the ratios for multiple contaminants. The cumulative ratio represents a non-carcinogenic hazard index (HI). A hazard index of 1 or less is generally considered "safe". A ratio greater than 1 suggests further evaluation.

- The cumulative risks (and hazards) for all wells can be plotted as risk isopleths on site plots of the Phase 1a Area.

If you have any questions, please call me at (415) 972-3149.

Sincerely,

Chris Lichens
Superfund Project Manager

cc: Fred Schauffler, EPA
Tom Perina, CH2M Hill
Dave Chamberlin, CDM
Lori Parnass, CDTSC